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Summary of Bill of Quantities for Works

Option # 1 - Aggregate Base Roadway, Lined Channel, & Culverts

Bill No.	Description	Price
1	Road Construction	
	Total	

Bill No. 1 Road Construction

Item No.	Description	Unit	Qty.	Unit Price	Price
1.01	Excavation for Side Trenches	cu. m	498		
1.02	Excavation, Grading and Compaction for Road Widening	cu. m	180		
1.03	Excavation for Culverts	cu. m	90		
1.04	Culvert Backfill	cu. m	30		
1.05	Installation of 30 cm dia. RCP (2 each @ 15 LM)	Lm	30		
1.06	Stone Masonry for Drainage Channel	cu. m	377		
1.07	Concrete T Walls	ea	80		
1.08	Installation of Aggregate Base (15 cm)	cu. m	234		
1.09	Mobilization and Demobilization (5%)	LS			
	Sub Total				
1.10	Contingency (10%)	LS			
	Total				

Option # 1 Construction Components

- * Existing road to be re-graded
- * Excavation, grading, and compaction to widen road from 0+00 to 0+50 m
- * Grade existing road, place 15 cm aggregate base and compact to 95% relative compaction.
- * Construct stone masonry side drainage on north side of road
- * Install 2 x 30cm dia. RCP culverts - one at 0+00 and one at 1 + 45m (15 Lm each)
- * Install 80 concrete T walls adjacent to building

NOTE: This option is based on visual assessment and not per a soil investigation or survey data

Summary of Bill of Quantities for Works

Option # 2 - Asphalt Roadway, Earthen Swale, & Culvert

Bill No.	Description	Price
1	Road Construction	
	Total	

Bill No. 1 Road Construction

Item No.	Description	Unit	Qty.	Unit Price	Price
1.01	Excavation, Grading, and Compaction of road widening & swale extension	cu. m	310	\$	
1.02	Excavation for Retention Basin and Culvert	cu. m	109	\$	
1.03	Culvert Backfilling	cu. m	15	\$	
1.04	Installation of 30 cm dia. RCP (1 @ 15 LM)	Lm	15	\$	
1.05	Installation of Asphalt Concrete (7.5 cm)	cu. m	117	\$	
1.06	Concrete T walls	ea	80	\$	
1.07	Installation of Aggregate Base (15 cm)	cu. m	234	\$	
1.09	Mobilization and Demobilization (5%)	LS			
	Sub Total				
1.10	Contingency (10%)	LS			
	Total				

Option # 2 Construction Components

- * Excavate road from 0+00 to 0+50m to re-establish existing swale on north side. Extend swale to end of road (0+50 to 0+250).
- * Existing road to be regraded.
- * Grade existing road, place 15 cm aggregate base and compact to 95% relative compaction.
- * Place 7.5 cm asphalt and compact to 98% relative compaction.
- * Regrade road at 2% slope towards the southern drainage channel.
- * Excavate and backfill with gravel 4m x 4m x 4m retention basin on north (mountain) side of road at 0+00.
- * Install 80 concrete T walls adjacent to building.
- * Construct one RCP culvert at Station 0+00.

NOTE: This option is based on visual assessment and not per a soil investigation or survey data

Summary of Bill of Quantities for Works

Option # 3 - Asphalt Roadway, Lined Channel, & Culverts

Bill No.	Description	Price
1	Road Construction	
	Total	

Bill No. 1 Road Construction

Item No.	Description	Unit	Qty.	Unit Price	Price
1.01	Excavation for Side Trenches	cu. m	498	\$	
1.02	Excavation, Grading and Compaction for Road Widening	cu. m	180	\$	
1.03	Excavation for Culverts	cu. m	90	\$	
1.04	Culvert Backfill	cu. m	30	\$	
1.05	Installation of 30 cm dia. RCP (2 each @ 15 LM)	Lm	30	\$	
1.06	Install Asphalt Concrete (7.5 cm)	cu. m	117	\$	
1.07	Concrete T Walls	ea	80	\$	
1.08	Installation of Aggregate Base (15 cm)	cu. m	234	\$	
1.09	Stone Masonry for Drainage Channel	cu. m	377	\$	
1.10	Mobilization and Demobilization (5%)	LS			
	Sub Total				
1.11	Contingency (10%)	LS			
	Total				

Option # 3 Construction Components

- * Excavate existing road from 0+00 to 0+50m to widen road.
- * Grade existing road, place 15 cm aggregate base and compact to 95% relative compaction.
- * Construct stone masonry side drainage on north side of road.
- * Install 2 x 30cm dia. RCP culverts - one at 0+00 and one at 1 + 45m (15 Lm each).
- * Place 7.5 cm asphalt and compact to 98% relative compaction.
- * Install 80 concrete T walls adjacent to building.

NOTE: This option is based on visual assessment and not per a soil investigation or survey data

Summary of Bill of Quantities for Works

Option # 4 - Reinforced Concrete Roadway, Lined Channel, & Culverts

Bill No.	Description	Price
1	Road Construction	
	Total	

Bill No. 1 Road Construction

Item No.	Description	Unit	Qty.	Unit Price	Price
1.01	Excavation for Side Trenches	cu. m	498	\$	
1.02	Excavation, Grading and Compaction for Road Widening	cu. m	180	\$	
1.03	Excavation for Culverts	cu. m	90	\$	
1.04	Culvert Backfill	cu. m	30	\$	
1.05	Installation of 30 cm dia. RCP (2 each @ 15 LM)	Lm	30	\$	
1.06	Stone Masonry for Drainage Channel	cu. m	377	\$	
1.07	Concrete T Walls	ea	80	\$	
1.08	Reinforced concrete pavement (20 cm)	cu. m	300	\$	
1.09	Mobilization and Demobilization (5%)	LS			
	Sub Total				
1.10	Contingency (10%)	LS			
	Total				

Option # 4 Construction Components

- * Existing road to be re-graded.
- * Excavate grade, compact to widen the road from 0+00 to 0+50 m.
- * Construct stone masonry side drainage on north side of road.
- * Install 2 x 30cm dia. RCP culverts - one at 0+00 and one at 1 + 45m (15 Lm each).
- * Form and pour reinforced concrete (20cm).
- * Install 80 concrete T walls adjacent to building.

NOTE : This option is based on visual assessment and not per a soil investigation or survey data